

## Obturator hernia as a cause of recurrent pain in a patient with previously diagnosed endometriosis

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Recurrent chronic pelvic pain should prompt physicians to reassess the patient. The threshold to perform laparoscopy, and to consider and surgically treat all potential disease associated with pain, even non-gynecologic etiologies, should be low, especially in those whose pain is focal or unresponsive to hormone therapy. (*Fertil Steril*® 2008;89:962–3. ©2008 by American Society for Reproductive Medicine.)

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Obturator hernias are rare and can present as chronic pelvic pain in a pinpoint area, with radiation down the leg. The major challenge in patients with obturator hernias is early diagnosis and prompt intervention, with resection and mesh placement to avoid high morbidity rates once incarceration and obstruction occur (1).

A 47-year-old multiparous woman and avid athlete presented with complaint of constant, right-sided pelvic pain and a pulling sensation down the anterior and posterior surfaces of her right leg, a year after laparoscopic ablation of pelvic endometriosis that worsened with activity. She also noted dyspareunia and dysmenorrhea, and it was presumed that she had pain from recurrent endometriosis. She denied gastrointestinal or urinary complaints. Laparoscopy revealed a 1 × 1 × 1-cm right obturator hernia in the precise location of her pelvic pain and mild pelvic endometriosis. The obturator hernia contained peritoneum, but no bowel (Figs. 1 and 2). A Marlex mesh (Chevron Phillips Chemical Company, Woodlands, TX) plug was used to seal the defect, and endometriotic implants were excised by laser. Six months postoperatively, the patient is asymptomatic and is not on hormone therapy.

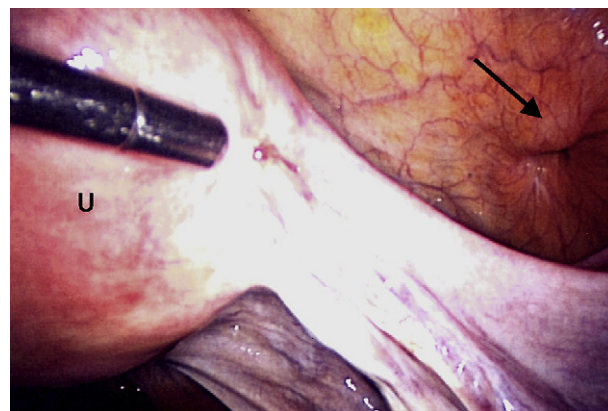
An obturator hernia is a peritoneal defect that is bounded by the inferior aspect of the superior ramus of the pubic bone and the corresponding ramus of the ischium. There

are three stages of formation of an obturator hernia: [1] entry of preperitoneal connective tissue and fat into the pelvic orifice of the obturator canal, [2] dimpling of peritoneum over the obturator canal leading to formation of an empty peritoneal sac, and [3] entrance of an organ that eventually fails to reduce spontaneously (2). Our patient's hernia appeared to be in the second stage of development at the time of laparoscopy.

The constant focal nature of her pain, which radiated down her right leg and worsened with activity, is similar to reports of obturator hernias in athletes (1). Obturator hernias, before bowel entrapment, are associated with pain and

### FIGURE 1

The right obturator hernia is the dimpled area that, at the time of laparoscopy, did not contain any bowel (arrow). U = uterus.



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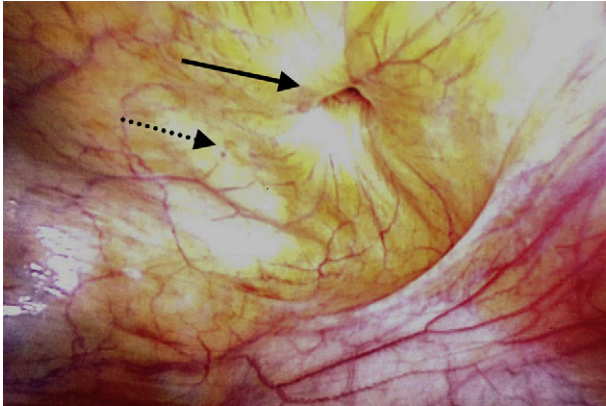
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## FIGURE 2

Pelvic peritoneum covering the right side of the bladder, anterior and lateral to the uterus. The right obturator hernia is the dimpled area (*solid arrow*). A red endometriosis lesion is indicated with a *dashed arrow*.



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neuromuscular symptoms in athletes. Computed tomography and magnetic resonance imaging have been reported to be helpful in the diagnosis, and the treatment of choice is repair with mesh placement (1). Although it is unknown whether this patient's pain resulted from endometriosis, the obturator hernia, or both, increased pain behaviors and augmented referred muscle hyperalgesia in an animal model of endometriosis with artificial ureteral stone placement suggest that non-gynecologic pelvic pain may worsen in the presence of endometriosis (3).

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